Application No. 10/003,462 Attorney Docket: 30797-717.201

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. The following amendments do not constitute an admission regarding the patentability of the amended subject matter and should not be so construed. Applicants reserve the right to pursue the cancelled subject matter in this or any other appropriate patent application. Applicants believe that the following amendments add no new matter.

Please amend the Claims as follows:

- (Currently amended) A vaccine composition containing <u>human TGFα "hTGFα"</u>,
 wherein said <u>h</u>TGFα comprises the amino acid sequence of SEQ ID NO 2 or its combination
 with other EGF-R ligands, coupled with any carrier protein by genetic cloning before expression
 of said proteins or by chemical conjugation after expression of said proteins, <u>wherein said
 vaccine that</u> contains an adjuvant, wherein said vaccine is able to produce a specific immune
 response against said hTGFα, and wherein said carrier protein is P64k.
- 2. (Previously amended) The vaccine composition according to claim 1 containing recombinant human TGFa.
 - 3. (Cancelled)
- 4. (Currently amended) The vaccine composition according to claim 1 that contains a recombinant fusion protein between hTGFα and P64k wherein a gene encoding said fusion protein is cloned in an expression vector system and expressed in mammalian cells, bacteria or yeast.
- (Currently amended) The vaccine composition according to claim 1 that contains a
 recombinant fusion protein between hTGFα and P64k wherein a gene encoding said fusion
 protein is cloned in an expression vector of bacteria and expressed in E. coli.
- Previously amended) The vaccine composition according to claim 1 that contains a recombinant fusion protein between hTGFα and P64k wherein a gene encoding said fusion

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protein is cloned in an expression vector of bacteria that presents a genetic sequence coding for six histidines in the N-terminal end of P64k and is expressed in E. coli.

- (Currently amended) The vaccine composition according to claim 1 wherein that hTGFα and P64k are coupled by a chemical method.
- (Currently amended) The vaccine composition according to claim 1 that contains hTGFα, EGF and P64k coupled by a chemical method.
- (Currently amended) The vaccine composition according to claim 1 that contains hTGFα, EGF and P64k in a recombinant fusion protein wherein a gene encoding said fusion protein is cloned in an expression vector of bacteria and expressed in E. coli.
- 10. (Currently amended) A vaccine composition comprising a mix of two vaccine preparations containing P64k coupled by a chemical method to $\underline{h}TGF\alpha$ or EGF respectively in the moment of the injection, wherein said $\underline{h}TGF\alpha$ comprises the amino acid sequence of SEQ ID NO 2.
- 11. (Currently amended) A vaccine composition comprising a mix of two vaccine preparations containing fusion proteins between the P64k and \underline{h} TGF α or EGF respectively in the moment of injection, wherein said \underline{h} TGF α comprises the amino acid sequence of SEO ID NO 2.
- 12. (Previously amended) The vaccine composition according to claim 1 wherein the adjuvant is incomplete adjuvant of Freund.
- (Previously amended) The vaccine composition according to claim 1 wherein the adjuvant is Al(OH)₃.
- 14. (Withdrawn) A method of immunization comprising, administration of the Immunization method with a vaccine composition according to claim 1, wherein administration of the vaccine able to achieves specific antibodies against hTGFα.
- 15. (Withdrawn) <u>The Treatment</u> method according to claim 14, able to generate wherein anti-hTGFα antibodies are generated, which anti-hTGFα antibodies are capable of avoid the inhibiting binding of TGFα bind to its receptor in an in vitro experiment.

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(Withdrawn) <u>The Treatment</u> method according to claim 14, <u>wherein able to generate</u> anti-hEGF antibodies <u>are generated</u>.

- 17. (Withdrawn) <u>The Treatment</u> method according to claim 14, able to generate wherein anti-hTGFα antibodies are generated, which anti-hTGFα antibodies are able of to recognize TGFα in human tumor biopsies.
- 18. (Withdrawn) A Method method of treatment of treating a malignant disease, wherein the malignant disease is selected from among diseases, such as epidermoide breast carcinomas, prostate cancers, gastric cancers, and ovary epithelial cancer, which cancer that expresses hTGFα and other ligands of EGF-R-such as EGF, with comprising administering the a-vaccine composition according to of claim 1.
 - 19. (New) The method of claim 18, wherein said other ligand of EGF-R is EGF.